

LISTING OF CLAIMS:

Claims 1-6 (Canceled).

7. (Currently Amended) A reproduction apparatus for reproducing a digital stream generated by multiplexing a video stream and a graphics stream, comprising:
a video decoder operable to decode the video stream to generate a moving picture;
a graphics decoder operable to decode the graphics stream to generate graphics, wherein upon reading control data in the graphics stream, the graphics decoder transfers graphics generated by decoding graphics data that precedes the control data in the graphics stream to a plane memory, based on the control data
a graphics decoder; and
a plane memory, wherein
the graphics stream is a sequence of packets, the packets constituting the graphics stream
include two types, one of which is packets containing graphics data and the other is packets
containing control data, the sequence of packets includes a pair of a packet containing graphics
data and a packet containing control data, the pair is followed by a packet containing control data
that performs a forward reference,
the control data that performs the forward reference indicates that graphics, which
corresponds to the graphics data contained in the pair of packets which precedes the control data
that performs the forward reference, is to be displayed.
the graphics decoder includes:
an object buffer;
a processor operable to generate graphics on the object buffer by decoding the graphics
data contained in the pair of packets; and
a controller operable to execute a graphics display by writing the graphics generated on
the object buffer into a partial area in the plane memory, based on the control data contained in
the pair of packets, wherein
the plane memory is a memory for overlay with moving pictures and is provided in the
reproduction apparatus, and
when control data that performs a forward reference has been read into the graphics
decoder from a recording medium, the controller updates the graphics display by writing the
graphics generated on the object buffer into the partial area again based on the read control data
that performs the forward reference.

Claims 8-12 (Canceled).

13. (Currently Amended) A method of recording onto a recording medium, comprising the steps of:

generating application data; and

recording the application data to the recording medium, wherein:

the application data includes a digital stream generated by multiplexing a video stream and a graphics stream;

the graphics stream is a sequence of packets, the packets constituting the graphics stream include two types, one of which is packets containing graphics data and the other is packets containing control data, the sequence of packets includes a pair of a packet containing graphics data and a packet containing control data, the pair is followed by a packet containing control data that performs a forward reference; and

the control data that performs the forward reference indicates that graphics, which corresponds to the graphics data contained in the pair of packets which precedes the control data that performs the forward reference, is to be displayed.

Claim 14 (Canceled)

15. (Currently Amended) A method of ~~reproducing causing a computer to reproduce~~ a digital stream generated by multiplexing a video stream and a graphics stream, comprising the steps of:

decoding the video stream to generate a moving picture; and

decoding the graphics stream to generate graphics; wherein

the graphics stream is a sequence of packets, the packets constituting the graphics stream include two types, one of which is packets containing graphics data and the other is packets containing control data, the sequence of packets includes a pair of a packet containing graphics data and a packet containing control data, the pair is followed by a packet containing control data that performs a forward reference, the control data that performs the forward reference indicates that graphics, which corresponds to the graphics data contained in the pair of packets which precedes the control data that performs the forward reference, is to be displayed, the graphics decoding step includes the sub-steps of:

generating graphics on an object buffer provided in the computer by decoding the graphics data contained in the pair of packets; and

executing a graphics display by writing the graphics generated on the object buffer into a partial area in a plane memory provided in the computer, based on the control data contained in the pair of packets, wherein

the plane memory is a memory for overlay with moving pictures, and

when control data that performs a forward reference has been read into the graphics decoder from a recording medium, the graphics display executing sub-step updates the graphics display by writing the graphics generated on the object buffer into the partial area again based on the read control data that performs the forward reference.

16. (Currently Amended) A reproduction apparatus for reproducing a digital stream generated by multiplexing a video stream and a graphics stream, comprising:

a video decoder operable to decode the video stream to generate a moving picture, and store a picture constituting the moving picture into a video plane;

a graphics decoder operable to decode the graphics stream to generate graphics, and store the generated graphics into a graphics plane; and

an adder operable to overlay the graphics and the moving picture by performing addition for corresponding pixels in the picture stored in the video plane and the graphics stored in the graphics plane, wherein

upon reading control data newly from a recording medium, the graphics decoder transfers graphics which have been generated by decoding graphics data that precedes the control data in the graphics stream, to the graphics plane based on the control data

the graphics stream is a sequence of packets, the packets constituting the graphics stream include two types, one of which is packets containing graphics data and the other is packets containing control data, the sequence of packets includes a pair of a packet containing graphics data and a packet containing control data, the pair is followed by a packet containing control data that performs a forward reference.

the control data that performs the forward reference indicates that graphics, which corresponds to the graphics data contained in the pair of packets which precedes the control data that performs the forward reference, is to be displayed.

the graphics decoder includes:

an object buffer;

a processor operable to generate graphics on the object buffer by decoding the graphics data contained in the pair of packets; and

a controller operable to execute a graphics display by writing the graphics generated on the object buffer into a partial area in the plane memory, based on the control data contained in the pair of packets, wherein

the plane memory is a memory for overlay with moving pictures and is provided in the reproduction apparatus, and

when control data that performs a forward reference has been read into the graphics decoder from a recording medium, the controller updates the graphics display by writing the graphics generated on the object buffer into the partial area again based on the read control data that performs the forward reference.